AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-44. (canceled)

45. (Currently Amended) A captured image data processing method ~~characterized by~~ <u>comprising</u>:

~~a step of~~ subtracting, from a pixel value of ~~each pixel which constitutes~~ <u>a</u> second image data acquired by way of an imaging process causing a first light source to emit light, a pixel value of a corresponding pixel of first image data acquired by way of an imaging process causing the first light source not to emit light~~, and~~ <u>:</u>

obtaining difference image data corresponding to an image captured in an irradiation environment of only the first light source <u>based on the subtraction</u>;

~~a difference image data pixel value adjustment processing step of~~ performing <u>a</u> white balance adjustment process ~~as a pixel value adjustment process with respect to~~ <u>on</u> the difference image data; ~~and~~

<u>adding pixel values of pixels in the difference image data to corresponding pixel values of the first image data; and</u>

<u>generating a final pixel value adjustment image based on the addition of the difference image data and the first image data.</u> ~~a final pixel value adjustment image generation step of applying image data of adjusted pixel values generated in the~~

~~difference image data pixel value adjustment processing step, and generating a final~~ ~~pixel value adjustment image.~~

46. (Currently Amended) The captured image data processing method according to claim 45, ~~characterized by~~ further including:

~~a first image data pixel value adjustment processing step of~~ performing <u>a</u> pixel value adjustment process ~~with respect to~~ <u>on</u> the first image data<u>.</u> ~~; wherein the final pixel~~ ~~value adjustment image generation step is a step of performing a pixel value addition~~ ~~process for the corresponding pixels of two image data of adjusted pixel values~~ ~~acquired by the difference image data pixel value adjustment processing step and the~~ ~~first image data pixel value adjustment processing step, and generating final pixel value~~ ~~adjustment image data.~~

47. (Currently Amended) The captured image data processing method according to claim 46, ~~characterized in that~~ <u>wherein</u> the <u>white balance adjustment</u> <u>process performed on the</u> difference image data ~~pixel value adjustment processing step~~ ~~is a white balance adjustment process~~ <u>is performed</u> according to a parameter ~~set~~ based on an light component of the first light source, and the <u>pixel value adjustment process</u> <u>performed on the</u> first image data ~~pixel value adjustment processing step~~ is a white balance adjustment process according to a parameter ~~set~~ based on an ambient light component which does not contain the first light source.

48. (Currently Amended) The captured image data processing method according to claim 47, ~~characterized in that~~ <u>wherein</u> the parameter is ~~a parameter~~ represented by a 3 × 3 matrix, the matrix applied for conversion of color components which constitute ~~a color~~ <u>colors</u> of ~~each pixel~~ <u>pixels</u>.

49. (Currently Amended) The captured image data processing method according to claim 48, ~~characterized in that~~ <u>wherein</u> the 3 × 3 matrix is a matrix set as 0 with exception to diagonal components.

50. (Canceled)

51. (Currently Amended) The captured image data processing method according to claim [[50]] <u>45</u>, ~~characterized in that the~~ <u>wherein performing the white</u> <u>balance adjustment process comprises performing the process on the</u> difference image data ~~pixel value adjustment processing step is a white balance adjustment process~~ according to a parameter ~~set~~ based on ambient light component which does not contain the first light source.

52. (Currently Amended) The captured image data processing method according to claim 45, ~~characterized by~~ further including:

~~a motion detecting step of~~ detecting a moving portion where a subject moves according to ~~the~~ difference data of a plurality of image data; and

~~a moving portion pixel value adjustment step of~~ performing <u>a</u> pixel value adjustment process with respect to the moving portion.

53. (Currently Amended) The captured image data processing method according to claim 52, ~~characterized in that~~ <u>wherein detecting a moving portion further comprises:</u> ~~the moving portion pixel value adjustment step has:~~

~~a step of~~ calculating a light intensity scalar ratio of two light sources when the first light source is caused or not caused to emit light, as data corresponding to a pixel of a motionless portion adjacent to a moving portion;

~~a step of~~ using a radial basis function (RBF) ~~so as~~ to calculate ~~the~~ <u>a</u> light intensity scalar ratio corresponding to ~~each pixel~~ <u>pixels</u> of the moving portion;

~~a first pixel value calculation step of~~ calculating ~~the~~ <u>a first</u> pixel value~~, as the first pixel value, of each pixel~~ of <u>the pixels of</u> the moving portion in an image which is equivalent to the image captured in an irradiation environment of the first light source only, based on the light intensity scalar ratio corresponding to ~~each pixel~~ <u>the pixels</u> of the moving portion;

~~a second pixel value calculation step of~~ calculating ~~the~~ <u>a second</u> pixel value~~, as the second pixel value, of each pixel~~ of <u>the pixels of</u> the moving portion in an image which is equivalent to the image captured in an ambient light irradiation environment where the first light source is not included, based on the light intensity scalar ratio corresponding to ~~each pixel~~ <u>the pixels</u> of the moving portion;

~~a first pixel value adjustment processing step of~~ performing the pixel value adjustment process, based on the first pixel value, to create a first adjustment pixel value ~~calculated in the first pixel value calculation step~~;

~~a second pixel value adjustment processing step of~~ performing the pixel value adjustment process, based on the second pixel value, to create a second adjustment pixel value ~~calculated in the second pixel value calculation step~~; and

~~a pixel value addition step of~~ adding ~~two~~ the first and second adjustment pixel values ~~generated in the first pixel value adjustment processing step and the second pixel value adjustment processing step~~.

54. (Currently Amended) The captured image data processing method according to claim 53, ~~characterized in that~~ wherein the ~~first~~ pixel value adjustment processing performed based on the first pixel value ~~step~~ is a white balance adjustment process according to a parameter ~~set~~ based on a light component of the first light source; and

the ~~second~~ pixel value adjustment processing performed based on the second pixel value ~~step~~ is a white balance adjustment process according to a parameter ~~set~~ based on an ambient light component which does not contain the first light source.

55. (Currently Amended) The captured image data processing method according to claim 52, ~~characterized in that the moving portion pixel value adjustment step further has:~~ wherein detecting a moving portion further comprises:

a step of calculating a color component ratio $(\alpha_r, \alpha_g, \alpha_b)$ of a pixel value of an inner peripheral pixel of the moving portion to an average pixel value of outer peripheral pixels of the moving portion adjacent to the inner peripheral pixel of the moving portion;

a step of constructing the a radial basis function (RBF) based on the color component ratio corresponding to each pixel pixels by considering all the inner peripheral pixels in the moving portion as sample points; and

a step of calculating the color component ratio corresponding to each pixel pixels of the moving portion, based on the radial basis function (RBF)[[,]] ; and

multiplying the color component ratio with an image to be compensated and obtaining a compensation pixel value.

56. (Currently Amended) The captured image data processing method according to claim 45, characterized by further including:

a motion detecting step of detecting a moving portion where a subject moves according to the difference data of a plurality of image data; and

a step of performing the pixel value adjustment process based on the second image data acquired by way of an imaging process causing the first light source to emit light when a proportion of the whole image of the moving portion is higher than a predetermined threshold value;

wherein data produced based on the pixel value adjustment process data based on the second image data is set as a final pixel value adjustment data.

57. (Currently Amended) The captured image data processing method according to claim 56, ~~characterized in that~~ wherein the pixel value adjustment process based on the second image data is either a white balance adjustment process according to a parameter ~~set~~ based on a light component of the first light source, the white balance adjustment process according to a parameter ~~set~~ based on ambient light component not containing the first light source, or a white balance adjustment process according to a parameter ~~set~~ based on an intermediate light component between the first light source and ambient light component not containing the light component of the first light source.

58. (Currently Amended) A captured image data processing apparatus ~~characterized by~~ comprising:

a memory for storing first image data acquired by way of an imaging process causing ~~the~~ a first light source not to emit light, and a second image data acquired by way of an imaging process causing the first light source to emit light; and

a data processing unit for performing a pixel value adjustment process based on the image data stored in the memory; the data processing unit including:

a difference image data acquisition unit for subtracting, from a pixel value of ~~each pixel which constitutes~~ the second image data, a pixel value of a corresponding pixel of the first image data, so as to acquire difference image data corresponding to an image captured in an irradiation environment of ~~only~~ the first light source;

a difference image data pixel value adjustment unit for performing a white balance adjustment process ~~as the pixel value adjustment process with respect to~~ <u>on</u> the difference image data; ~~and~~

<u>a pixel value adding unit for adding a pixel value of pixels in the difference image data to corresponding pixel values of the first image data; and</u>

a final pixel value adjustment unit for performing <u>pixel value adjustment with respect to image data generated in the pixel value adding unit, and generating the final pixel value adjustment image data.</u> ~~a final pixel value adjustment by using a image data of adjusted pixel values generated in the difference image data pixel value adjustment unit.~~

59. (Currently Amended) The captured image data processing apparatus according to claim 58, ~~characterized in that~~ <u>wherein</u> the data processing unit further includes <u>a</u> first image data pixel value adjustment unit for performing <u>a</u> pixel value adjustment process ~~with respect to~~ <u>on</u> the first image data<u>.</u> ~~; wherein the final pixel value adjustment unit is arranged to perform pixel value addition process for corresponding pixels of two image data of adjusted pixel values generated in the difference image data pixel value adjustment unit and the first image data pixel value adjustment unit, and generate the final pixel value adjustment image data.~~

60. (Currently Amended) The captured image data processing apparatus according to claim 59, ~~characterized in that~~ <u>wherein</u> the difference image data pixel

value adjustment unit is arranged to perform the white balance adjustment process according to a parameter set based on a light component of the first light source; and

the first image data pixel value adjustment unit is arranged to perform the white balance adjustment process according to a parameter set based on an ambient light component not including the first light source.

61. (Canceled)

62. (Currently Amended) The captured image data processing apparatus according to claim [[61]] 58, characterized in that the difference image data pixel value adjustment unit performs the white balance adjustment process according to a parameter set based on ambient light component not including the first light source.

63. (Currently Amended) The captured image data processing apparatus according to claim 58, characterized in that wherein the data processing unit includes:

a motion detection unit for detecting a moving portion of a subject based on difference data between a plurality of image data; and

a moving portion pixel value adjustment unit for performing a pixel value adjustment process with respect to the moving portion.

64. (Currently Amended) The captured image data processing apparatus according to claim 63, wherein the moving portion pixel value adjustment unit is characterized by further performs the steps of:

calculating a light intensity scalar ratio of two light sources when the first light source is caused or not caused to emit light, as data corresponding to a pixel of a motionless portion adjacent to a moving portion;

calculating light intensity scalar ratio corresponding to ~~each pixel~~ pixels of the moving portion by applying a radial basis function (RBF);

calculating a first pixel value ~~as first pixel value of each pixel~~ of the pixels of the moving portion in an image which is equivalent to the captured image in an irradiation environment of only the first light source, based on light intensity scalar ratio corresponding to ~~each pixel~~ the pixels of the moving portion;

calculating a second pixel value ~~as second pixel value of each pixel~~ of the pixels of the moving portion in an image which is equivalent to the captured image in an ambient light irradiation environment where the first light source is not included, based on light intensity scalar ratio corresponding to ~~each pixel~~ the pixels of the moving portion;

performing the pixel value adjustment process, based on the first pixel value;

performing the pixel value adjustment process based on the second pixel value; and

adding the ~~generated two~~ first and second adjustment pixel values to perform a moving portion pixel value adjustment process.

65.   (Currently Amended) The captured image data processing apparatus according to claim 64, ~~characterized in that~~ wherein the ~~first~~ pixel value adjustment process performed based on the first pixel value is ~~performed as the~~ a white balance

adjustment process according to a parameter ~~set~~ based on a light component of the first light source; and

the ~~second~~ pixel value adjustment process <u>performed based on the second pixel value</u> is ~~performed as~~ a white balance adjustment process according to a parameter ~~set~~ based on ambient light component not including the first light source.

66. (Currently Amended) The captured image data processing apparatus according to claim 63, wherein the moving portion pixel value adjustment unit is ~~characterized by~~ <u>further performs the steps of</u>:

calculating a color component ratio $(\alpha_r, \alpha_g, \alpha_b)$ of the pixel value of an inner peripheral pixel of the moving portion to an average value of the pixel value of an outer peripheral pixel of the moving portion adjacent to the inner peripheral pixel of the moving portion;

constructing a radial basis function (RBF) based on the color component ratio corresponding to ~~each pixel~~ <u>pixels</u> by considering all the inner peripheral pixels in the moving portion as sample points;

calculating the color component ratio corresponding to ~~each pixel~~ <u>pixels</u> of the moving portion based on the radial basis function (RBF); and

multiplying the color component ratio with an image to be compensated, and obtaining a compensation pixel value.

67. (Currently Amended) The captured image data processing apparatus according to claim 63, wherein the data processing unit is ~~characterized by~~ further performs the steps of:

performing the pixel value adjustment process based on the second image data acquired by way of an imaging process causing the first light source to emit light when a proportion of the whole image of the moving portion detected by the motion detection unit is higher than a predetermined threshold value, and the pixel value adjustment data based on the second image data is set as final pixel value adjustment data.

68. (Currently Amended) The captured image data processing apparatus according to claim 67, ~~characterized in that~~ wherein the pixel value adjustment process based on the second image data performs either a white balance adjustment process according to the parameter set up based on the light component of the first light source, the white balance adjustment process according to the parameter set up based on ambient light component not including the first light source, or the white balance adjustment process according to the parameter set up based on an intermediate light component between the light component of the first light source and ambient light component not including the first light source.

69. (Currently Amended) A captured image data processing method ~~characterized by~~ comprising:

~~a step of~~ acquiring first image data by way of an imaging process causing ~~the~~ a first light source not to emit light;

a step of acquiring a second image data by way of an imaging process causing the first light source to emit light;

a step of subtracting, from a pixel value of ~~each pixel which constitutes~~ the second image data, a pixel value of a corresponding pixel of the first image data, and acquiring [[a]] difference image data corresponding to ~~the~~ <u>an</u> image captured in an irradiation environment of only the first light source;

~~a difference image data pixel value adjustment processing step of~~ performing a white balance adjustment process ~~as the pixel value adjustment process with respect to~~ <u>on</u> the difference image data; ~~and~~

<u>adding pixel values of pixels in the difference image data to corresponding pixel values of the first image data; and</u>

~~a final pixel value adjustment image generation step of~~ generating a final pixel value adjustment image <u>based on the addition of the difference image data and the first image data.</u> ~~by using the adjusted pixel value image data generated in the difference image data pixel value adjustment processing step~~.

70-73. (Canceled)

74. (Currently Amended) A captured image data processing apparatus ~~characterized by~~ <u>comprising</u>:

an imaging means for acquiring a plurality of image data by way of an imaging process causing a first light source not to emit light and an imaging process causing the first light source to emit light;

a memory for storing first image data acquired by way of the imaging process causing the first light source not to emit light and a second image data acquired by way of the imaging process causing the first light source to emit light; and

a data processing unit for performing a pixel value adjustment process based on the image data stored in the memory; wherein the data processing unit includes:

a difference image data acquisition unit for subtracting, from a pixel value of ~~each pixel which constitutes~~ the second image data, a pixel value of a corresponding pixel of the first image data, so as to acquire difference image data corresponding to <u>an</u> image captured in an irradiation environment of ~~only~~ the first light source;

a difference image data pixel value adjustment unit for performing a white balance adjustment process ~~as the pixel value adjustment process with respect to~~ <u>on</u> the difference image data; ~~and~~

<u>a pixel value adding unit for adding a pixel value of pixels in the difference image data to corresponding pixel values of the first image data; and</u>

a final pixel value adjustment unit for performing <u>pixel value adjustment with respect to image data generated in the pixel value adding unit, and generating the final pixel value adjustment image data.</u> ~~a final pixel value adjustment by using a image data of adjusted pixel values generated in the difference image data pixel value adjustment unit~~.

75-76. (Canceled)